

REMARKS

Reconsideration and allowance of this application are respectfully requested based on the following analysis.

1. Overview of Non-Final Office Action

Claims 1, 2, 5, 9, 10 and 15 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable by Niida et al. (US 6,052,507; hereafter “Niida”) in view of Negishi in further view of Anderson et al. (US 6,091,772; hereafter “Anderson”).

Claims 3, 4, 6-8, 11-14 and 16 are rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Niida in view of Negishi in further view of Anderson in further view of Oishi et al (US 6,779,195; hereafter “Oishi”).

2. Summary of Claim Amendments

Applicant amends the claims to more clearly define the inventive features described in the specification, and thus, respectfully submits that the claims are further distinguished from the cited references.

Claim 1 is amended at least based on FIGS. 3-4 and corresponding descriptions in the specification, by which the claimed additional information is recited as being extracted from the PSI packet. Further, claim 1 is amended to recite that the PSI packet is not stored in the storage medium as an AV packet has already the additional information corresponding to the PSI packet.

Claims 2-9 are amended to be consistent with the claim 1 amendment and to more clearly define the features recited therein based on the original disclosure.

Claim 10 is amended to more clearly define the features recited therein based on the

original disclosure.

Claims 11-13 are amended to be consistent with the claim 10 amendment.

Claim 14 is amended based on the original disclosure to more clearly define the user desired program information and the parameter output from the feature parser of claim 10.

Claim 15 is amended in a similar manner as claim 1.

Claim 16 is also amended to more clearly define the user desired program information of claim 15.

New claims 17 and 18 are proposed to more fully cover the present application. Support for the new claims can be found at least in FIGS. 3-4 and corresponding descriptions including the last paragraph of the specification.

3. Analysis of § 103 Claim Rejection

In rejecting **claim 1** over Niida in view of Negishi and Anderson, the Examiner asserts as follows:

- (i) Niida discloses the AV parser, the storage medium and the controller as claimed;
- (ii) Negishi discloses the packet parser and the AV producer as claimed; and
- (iii) Anderson teaches additional information containing content of a transport stream (TS) but not containing packet identifier information (PID) as the claimed additional information.

Regarding (i), the Examiner asserts that Niida (FIG. 12 and col. 13, lines 13-46) discloses the claimed AV parser that parses and outputs an AV packet using a PID.

The cited part of Niida discloses how to detect a program clock reference (PCR) value from an input data for normal reproduction, and how to generate a PCR value in accordance with the detected PCR value when a normal reproduction mode is changed to a specific reproduction mode (e.g. a trick play) at a recording/reproducing apparatus. In this cited part, however, Niida does not disclose any unit corresponding to the claimed AV parser that parses and outputs an AV packet. As known in the art, the PCR is only a value used for synchronization of a decoding system with an encoding system; however, the PCR value is not an audio or video packet or information that is extracted from a TS packet and parsed to be inserted into an AV packet itself later as recited in the claim. Thus, the claimed AV parser is not disclosed by Niida.

Niida is also alleged to disclose the claimed storage medium in FIG. 6. The Examiner asserts that the memory 106 and the buffer 108 (FIG. 6 of Niida) correspond to the claimed storage medium.

The description of FIG. 6 shows that the memory 106 holds the PSI of normal reproduction data, and the buffer 108 stores a bit stream. However, neither of the memory 106 and the buffer 108 stores an AV packet in which the claimed additional information is inserted, where the additional information is extracted from a TS packet, corresponds to the PID extracted from at least one PSI packet output from the TS packet, and does not include the PID. Thus, the claimed storage medium is not disclosed by Niida.

Niida (FIG. 12 and col. 14, lines 6-33) also fails to disclose the claimed controller.

The control circuit 112 (FIG. 12 of Niida), allegedly corresponding to the claimed controller, controls the PCR memory 109 and the PSI memory 110 to output a PCR value and a PSI stored therein, respectively, which are multiplexed at the multiplexer 311. Here, the

multiplexed data is composed of a PCR value and a PSI. However, this multiplexed data does not correspond to an AV packet having additional information within the AV packet, at least because the multiplexed data does not include any audio or video data or information. Thus, the claimed controller is not disclosed by Niida.

Next, with regard to (ii), the Examiner asserts that Negishi (FIG. 1; col. 6, lines 37-67; and col. 8, lines 23-65) discloses the claimed “additional information” that is extracted from a TS packet and inserted into an AV packet.

Col. 8, lines 23-65 of Negishi discloses that the bit stream multiplexer 4 (FIG. 1) multiplexes elementary streams and “additional information (in a broad sense)” to output a multiplexed stream. This additional information (in a broad sense) is composed of schedule information and additional data. However, the schedule information is only described as information required for appropriate scheduling (no overflow and no underflow buffering at the buffer of a decoder) and synchronization of elementary streams (col. 3, lines 52-60 of Negishi). Thus, this schedule information cannot have information extracted from a PSI packet such as an event information table (EIT) packet as defined in the specification of the present application or known in the art, because the PSI packet is not configured to provide information for scheduling or synchronization of elementary streams, but configured to have information related to a corresponding AV data itself. Also, the cited part of Negishi does not disclose if the schedule information is inserted into a corresponding elementary stream itself. Instead, col. 9, lines 9-16 of Negishi discloses that the schedule information is only used for multiplexing elementary streams and additional data, but is not multiplexed with the elementary streams. Thus, the schedule information cannot correspond to the claimed additional information.

The additional data is also not the claimed additional information because Negishi does not disclose that the additional data is or has information extracted from a PSI packet corresponding to an elementary stream that is multiplexed with the additional data at the bit stream multiplexer 4. Note, again that the claimed additional information is extracted from a PSI packet which corresponds to an AV packet into which the additional information is inserted. Further, multiplexing the additional data with a corresponding elementary stream at the multiplexer 4 does not teach or suggest inserting the additional data into the elementary stream itself as the claimed additional information is inserted into a corresponding AV packet.

Moreover, some examples of the additional data disclosed in Negishi are not such information as being extracted from a PSI packet. A program clock reference (PCR; col. 2, lines 18-19), a MUX rate (col. 2, lines 21-22), a PSI (col. 3, line 26), a packet header (col. 11, line 44), etc. cannot be the claimed additional information which is extracted¹ from a PSI packet and inserted to an AV packet itself, where the AV packet corresponds to the PSI packet, and the PSI packet is outputted along with the AV packet from a same TS packet.

Therefore, the claimed additional information is not taught or suggested by any of the additional data and the schedule information disclosed in Negishi.

Turning to (iii), the Examiner asserts that col. 5, lines 50-63 of Anderson discloses that additional information transmitted along with AV data payload may not contain PID.

¹ As the claimed additional information is extracted from at least one PSI, it cannot be the PSI packet itself.

Contrary to the Examiner's assertion, however, the cited part only discloses that the additional information is "these tables" (col. 5, lines 55-56), and these tables are the PMT and PAT which must have PID as described in col. 5, lines 6-9. Moreover, the last sentence of the cited part (col. 5, lines 63) indicates that the PID is not removed from the additional information (these tables), whereby Anderson's "these tables" teach away from the claimed additional information that does not include the (corresponding) PID.

It should be noted that the claimed apparatus is configured to not store the PSI packet when the corresponding AV data is stored in the storage medium. This is possible as the AV packet already has the additional information corresponding to the PSI packet. By contrast, the cited references, taken alone or in combination, do not teach or suggest a storing apparatus in which AV data is stored without a corresponding PSI packet which is required to reproduce the AV data from the storing apparatus.

It should be further noted that the claimed additional information is clearly different from the PSI packet when the additional information is defined as being extracted from the PSI packet and does not include PID which is known to be included in a PSI packet. Thus, putting PSI data at the head of an MPEG stream does not meet the limitation of the claimed inserting additional information into an AV packet, contrary to the Examiner's assertion (page 4, lines 14-15 of office action).

At least under the foregoing analysis, the cited references do not teach or suggest the elements of the claimed apparatus. Accordingly, Applicant respectfully submits that claim 1 would not have been rendered obvious in view of the cited references.

Claims 2-9 should be allowable at least due to their dependencies and additionally recited elements.

With regard to **claim 10**, the Examiner also asserts that the claim is obvious over Niida in view of Negishi and Anderson.

However, the claimed apparatus should not be rendered obvious over the cited references because of similar reasons for claim 1. That is, Niida fails to disclose at least the claimed controller as discussed in the claim 1 analysis, and neither of the schedule information and the additional data disclosed in Negishi teaches or suggests the claimed additional information that is inserted into a particular region of the AV packet. Further, the cited references, taken alone or in combination, do not teach or suggest a storing apparatus in which the AV data is stored without a corresponding PSI packet which is required to reproduce the AV data from the storing apparatus.

Thus, claim 10 should be allowable over the cited references.

Claims 11-13 should be allowable at least due to their dependencies and additionally recited elements.

Regarding **claims 14**, the Examiner simply asserts that it is well known in that art that the PSI information disclosed in Niida contains information pertaining to the AV data such as title, time and content information.

However, it should be noted that the claimed additions information does not include a PID which is known in the art as being included in PSI information. That is, the claimed additional information is indicated in the claims as not being the PSI information itself. Further, the claimed additional information includes user desired program information input by a user,

whereby the claimed additional information is further distinguished from the PSI information as allegedly disclosed in Niida.

Claims 15 is also distinguished from the cited references at least because similar reasons as claim 1 directed to the claimed additional information. Further, it should be noted that the claimed apparatus does not use a PSI packet when searching a desired AV data, while conventional apparatuses as disclosed in the cited references are required to use PSI information to search corresponding AV data.

Thus, claim 15 should also be allowable over the cited references.

4. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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